

What is claimed is:

Sub B1

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1. A method of controlling an electronic still camera having a solid state imaging device with a matrix of pixels, an electronic view finder for displaying a moving picture of a photographic subject by an interlace-scanning, and a recording device for recording a still picture of the photographic subject as digital data on a recording medium in response to a shutter release operation, the method comprising the steps of:

obtaining field image signals of an odd field by adding a signal charge stored in each of those pixels aligned in even horizontal scanning lines of the solid state imaging device to a signal charge stored in one of those pixels detecting the same color in one of two adjacent odd horizontal scanning lines;

obtaining field image signals of an even field by adding the signal charge of each pixel of the even horizontal scanning lines to a signal charge stored in one of those pixels detecting the same color in the other of the two adjacent odd horizontal scanning lines;

displaying a frame of the moving picture based on the field image signals for the odd and even fields;

detecting signal levels of the field image signals;

starting, in response to the shutter release operation, to read signal charges stored in the individual pixels of the solid state imaging device by sequential scanning each horizontal scanning line, to provide image signals of one frame to record; and

determining depending upon the signal levels of the field image signals, signal levels of the image signals to record.

2. A method according to claim 1, wherein the signal levels of the image signals to record are controlled by changing exposure value or gain of an amplifier connected to an output of the solid state imaging device.

5 3. A method according to claim 2, wherein the solid state imaging device is driven with a charge storage time for obtaining the image signals to record, the charge storage time being twice as long as a charge storage time that is used for the field image signals immediately before the shutter release operation.

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4. A method according to claim 2, wherein the gain of the amplifier for each color is doubled for the image signals to record, compared with that used for the field image signals immediately before the shutter release operation.

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Sub B2

20 5. A method of controlling an electronic still camera having a solid state imaging device with a matrix of pixels and three-color separation filters, an electronic view finder for displaying a moving picture of a photographic subject, and a recording device for recording a still picture of the photographic subject as digital data on a recording medium in response to a shutter release operation, the method comprising the steps of:

driving the solid state imaging device at a first interval corresponding to a predetermined field frequency of an interlace-scanning used for displaying the moving picture;

25 determining a first charge storage time of the solid state imaging device in a range not more than the first interval;

obtaining field image signals for an odd field by adding a signal charge stored during the first charge storage time in each of those pixels aligned in even horizontal scanning lines of the solid state imaging device to a signal charge stored during the first charge storage time in one of those
5 pixels used for detecting the same color in one of two adjacent odd horizontal scanning lines;

obtaining field image signals for an even field by adding the signal charge of each pixel of the even horizontal scanning lines to a signal charge stored during the first charge storage time in one of those pixels used for
10 detecting the same color in the other of the two adjacent odd horizontal scanning lines;

displaying a frame of the moving picture based on the field image signals for the odd and even fields by the interlace-scanning;

detecting signal levels of the field image signals;

15 revising the first charge storage time in accordance with the detected signal levels;

determining, in response to the shutter release operation, a second charge storage time based on the first charge storage time;

obtaining image signals for one frame from signal charges stored
20 during the second charge storage time in the individual pixels of the solid state imaging device by sequential scanning each horizontal scanning^{of} line; and

recording the image signals of one frame as a still picture in the recording medium.

25 6. A method according to claim 5, wherein the second charge storage time is twice as long as the first charge storage time.

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